

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Moulson State WA Sampling Point B30
 Investigator(s) Smijers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>/</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>/</u>	
Wetland Hydrology Present? Yes _____ No <u>/</u>	
Remarks:	

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC <u>1</u> (A)
2 _____				Total Number of Dominant Species Across All Strata <u>4</u> (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC <u>25%</u> (A/B)
4 _____				
= Total Cover				
Sapling/Shrub Stratum (Plot size _____)				Prevalence Index worksheet:
1 _____				Total % Cover of _____ Multiply by _____
2 _____				OBL species _____ x 1 = _____
3 _____				FACW species _____ x 2 = _____
4 _____				FAC species _____ x 3 = _____
5 _____				FACU species _____ x 4 = _____
= Total Cover				UPL species _____ x 5 = _____
Herb Stratum (Plot size _____)				Column Totals _____ (A) _____ (B)
1 <u>L. Vulgare</u>	<u>40</u>	<u>X</u>	<u>UPL</u>	Prevalence Index = B/A = _____
2 <u>D. cordata</u>	<u>30</u>	<u>X</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:
3 <u>P. lanceolata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	— Dominance Test is >50%
4 <u>H. radicata</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	— Prevalence Index is ≤3.0
5 <u>F. rubra</u>	<u>10</u>		<u>FAC</u>	— "Morphological Adaptations" (Provide supporting data in Remarks or on a separate sheet)
6 <u>Ranunculus spp</u>	<u>10</u>		<u>FACW</u>	— Wetland Non-Vascular Plants
7 <u>Trifolium spp</u>	<u>10</u>		<u>FAC</u>	— Problematic Hydrophytic Vegetation (Explain)
8 <u>V. hirsuta</u>	<u>5</u>		<u>UPL</u>	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
9 <u>Fragaria virginiana</u>	<u>5</u>		<u>FAC</u>	
10 _____				
11 _____				
= Total Cover				
Woody Vine Stratum (Plot size _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1 _____				
2 _____				
= Total Cover				
% Bare Ground in Herb Stratum <u>5%</u>				
Remarks				

SOIL

Sampling Point

K205

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-10	10YR 4/4							
7-10	10YR 5/4		10YR 5/2	37				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C8)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Secondary Indicators (2 or more required)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): 15

Saturation Present? Yes _____ No X Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Morrison State WA Sampling Point 131
 Investigator(s) Smyley Section, Township, Range _____
 Landform (hill/slope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>/</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>/</u>	
Wetland Hydrology Present?	Yes _____ No <u>/</u>	
Remarks		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC <u>0</u> (A)
2 _____				Total Number of Dominant Species Across All Strata _____ (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
4 _____				
				= Total Cover
Sapling/Shrub Stratum (Plot size _____)				Prevalence Index worksheet:
1 _____				Total % Cover of _____ Multiply by _____
2 _____				OBL species _____ x 1 = _____
3 _____				FACW species _____ x 2 = _____
4 _____				FAC species _____ x 3 = _____
5 _____				FACU species _____ x 4 = _____
				UPL species _____ x 5 = _____
				Column Totals _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size _____)				Hydrophytic Vegetation Indicators:
1 <u>L. vulgare</u>	<u>20</u>	<u>X</u>	<u>UPL</u>	Dominance Test is >50% _____
2 <u>P. lanceolata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	Prevalence Index is ≤3.0' _____
3 <u>D. carota</u>	<u>20</u>	<u>X</u>	<u>UPL</u>	Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
4 <u>E. rupestris</u>	<u>15</u>		<u>FAC</u>	Wetland Non-Vascular Plants' _____
5 <u>H. radicata</u>	<u>15</u>		<u>FAC</u>	Problematic Hydrophytic Vegetation' (Explain)
6 <u>Trifolium spp</u>	<u>10</u>		<u>FAC</u>	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
7 <u>Ranunculus spp</u>	<u>10</u>		<u>FACU</u>	
8 <u>V. hirsuta</u>	<u>5</u>		<u>UPL</u>	
9 _____				
10 _____				
11 _____				
				= Total Cover
Woody Vine Stratum (Plot size _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1 _____				
2 _____				
				= Total Cover
% Bare Ground in Herb Stratum <u>10%</u>				
Remarks				

SOIL

Sampling Point: 431

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-12	10YR 4/4							
7-12	10YR 5/4		10YR 5/2	3.1				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1) ☐ Sandy Redox (S5)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2)
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3)
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6)
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)

- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ Salt Crust (B11)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): 18
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site ADZ City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Moulson State WA Sampling Point 132
 Investigator(s) Smijers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No _____	

Remarks _____

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC <u>0</u> (A) Total Number of Dominant Species Across All Strata _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
1 _____				
2 _____				
3 _____				
4 _____				
= Total Cover				Prevalence Index worksheet: Total % Cover of _____ Multiply by _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals _____ (A) _____ (B)
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				
Sapling/Shrub Stratum (Plot size _____)				
1 _____				Prevalence Index = B/A = _____
2 _____				
3 _____				
4 _____				
5 _____				
= Total Cover				Hydrophytic Vegetation Indicators: Dominance Test is >50% _____ Prevalence Index is ≥ 3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants _____ Problematic Hydrophytic Vegetation ¹ (Explain) _____ ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				
Herb Stratum (Plot size _____)				
1 <u>L. Vulgare</u>	<u>40</u>	<u>X</u>	<u>UPL</u>	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2 <u>D. carota</u>	<u>35</u>	<u>X</u>	<u>FACU</u>	
3 <u>P. lanceolata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	
4 <u>H. radicata</u>	<u>15</u>		<u>FAC</u>	
5 <u>Trifolium spp</u>	<u>15</u>		<u>FAC</u>	
6 <u>Saniculus spp</u>	<u>10</u>		<u>FACU</u>	
7 <u>Vicia hirsuta</u>	<u>10</u>		<u>UPL</u>	
8 _____				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
9 _____				
10 _____				
11 _____				
12 _____				
= Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				
Woody Vine Stratum (Plot size _____)				
1 _____				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2 _____				
3 _____				
4 _____				
5 _____				
= Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				
% Bare Ground in Herb Stratum <u>10%</u>				
Remarks _____				

SOIL

Sampling Point: 1532

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-13	10YR 3/3	100					
513	10YR 5/2		10YR 5/6				
			10YR 4/6				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if present):

Type _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks _____

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> FAC-Neutral Test (D5)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)	
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Frost-Heave Hummocks (D7)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		
<p>Field Observations:</p> <p>Surface Water Present? Yes _____ No <u>X</u> Depth (inches): <u>14</u></p> <p>Water Table Present? Yes _____ No <u>X</u> Depth (inches): <u>10</u></p> <p>Saturation Present? Yes <u>X</u> No _____ Depth (inches): _____</p> <p>(includes capillary fringe)</p> <p>Wetland Hydrology Present? Yes <u>X</u> No _____</p>		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.		
Remarks _____		

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A27 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner MORRISON State WA Sampling Point K33
 Investigator(s) Ameyers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) LRBA Lat _____ Long _____ Datum _____
 Soil Map Unit Name (12) NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>/</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>/</u>	
Wetland Hydrology Present? Yes _____ No <u>/</u>	

Remarks _____

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC <u>0</u> (A)
2 _____				Total Number of Dominant Species Across All Strata _____ (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
4 _____				
= Total Cover				
Sapling/Shrub Stratum (Plot size _____)				Prevalence Index worksheet:
1 _____				Total % Cover of _____ Multiply by _____
2 _____				OBL species _____ x 1 = _____
3 _____				FACW species _____ x 2 = _____
4 _____				FAC species _____ x 3 = _____
5 _____				FACU species _____ x 4 = _____
= Total Cover				UPL species _____ x 5 = _____
				Column Totals _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size _____)				Hydrophytic Vegetation Indicators:
1 <u>K. VULGARE</u>	<u>40</u>	<u>X</u>	<u>UPL</u>	___ Dominance Test is >50%
2 <u>Plantago lanceolata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	___ Prevalence Index is >3.0
3 <u>Daucus carota</u>	<u>20</u>	<u>X</u>	<u>UPL</u>	___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4 <u>D. hirsuta</u>	<u>25</u>	<u>X</u>	<u>FACU</u>	___ Wetland Non-Vascular Plants
5 <u>U. hirsuta</u>	<u>10</u>		<u>UPL</u>	___ Problematic Hydrophytic Vegetation ¹ (Explain)
6 _____				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
7 _____				
8 _____				
9 _____				
10 _____				
11 _____				
<u>115</u> = Total Cover				
Woody Vine Stratum (Plot size _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1 _____				
2 _____				
= Total Cover				
% Bare Ground in Herb Stratum <u>5.1</u>				

Remarks _____

SOIL

Sampling Point: 133

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-12	10YR 5/13	100%						
12-18	10YR 5/12		10YR 5/10	10%				
			10YR 5/10	30%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (If present):

Type _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks _____

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required, check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B8) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): 16

Saturation Present? Yes _____ No X Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available _____

Remarks _____

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A32 City/County Clallam Sampling Date 3.32.10
 Applicant/Owner NORRISON State WA Sampling Point 1534
 Investigator(s) Ameyers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No _____	

Remarks _____

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC <u>0</u> (A) Total Number of Dominant Species Across All Strata _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
1				
2				
3				
4				
= Total Cover				Prevalence Index worksheet: Total % Cover of _____ Multiply by _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals _____ (A) _____ (B)
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				
Sapling/Shrub Stratum (Plot size _____)				
1				Prevalence Index = B/A = _____ Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 _____ Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants _____ Problematic Hydrophytic Vegetation (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2				
3				
4				
5				
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				
Herb Stratum (Plot size _____)				
1				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
= Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
= Total Cover				
Woody Vine Stratum (Plot size _____)				
1				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2				
= Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
= Total Cover				
% Bare Ground in Herb Stratum <u>10.6</u>				
Remarks _____				

SOIL

Sampling Point

1234

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc ²		
0-12	10YR 3/3	100%						
212	10YR 5/2		10YR 5/6	15%				
			10YR 4/6	7%				

¹Type. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location. PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if present):

Type _____

Depth (inches) _____

Hydric Soil Present? Yes _____ No X

Remarks

Slight sheen.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

- | | | |
|------------------------|-----------------------|---------------------------|
| Surface Water Present? | Yes _____ No _____ | Depth (inches): _____ |
| Water Table Present? | Yes <u>X</u> No _____ | Depth (inches): <u>11</u> |
| Saturation Present? | Yes <u>X</u> No _____ | Depth (inches): _____ |

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A32 City/County Clallam Sampling Date 3.23.10
 Applicant/Owner Mohrson State WA Sampling Point 435
 Investigator(s) Myers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	

Remarks

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC <u>0</u> (A) Total Number of Dominant Species Across All Strata _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)														
1 _____																		
2 _____																		
3 _____																		
4 _____																		
			= Total Cover	Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of</th> <th>Multiply by</th> </tr> </thead> <tbody> <tr><td>OBL species</td><td>x 1 =</td></tr> <tr><td>FACW species</td><td>x 2 =</td></tr> <tr><td>FAC species</td><td>x 3 =</td></tr> <tr><td>FACU species</td><td>x 4 =</td></tr> <tr><td>UPL species</td><td>x 5 =</td></tr> <tr><td>Column Totals</td><td>(A) _____ (B) _____</td></tr> </tbody> </table> Prevalence Index = B/A = _____	Total % Cover of	Multiply by	OBL species	x 1 =	FACW species	x 2 =	FAC species	x 3 =	FACU species	x 4 =	UPL species	x 5 =	Column Totals	(A) _____ (B) _____
Total % Cover of	Multiply by																	
OBL species	x 1 =																	
FACW species	x 2 =																	
FAC species	x 3 =																	
FACU species	x 4 =																	
UPL species	x 5 =																	
Column Totals	(A) _____ (B) _____																	
				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is >3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.														
Sapling/Shrub Stratum (Plot size _____)																		
1 _____																		
2 _____																		
3 _____																		
4 _____																		
5 _____																		
			= Total Cover															
Herb Stratum (Plot size _____)																		
1 <u>L. bulgarica</u>	<u>40</u>	<u>X</u>	<u>UPL</u>															
2 <u>D. carota</u>	<u>35</u>	<u>X</u>	<u>UPL</u>															
3 <u>P. lanceolata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>															
4 <u>D. glomerata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>															
5 <u>F. rubra</u>	<u>15</u>		<u>FAC</u>															
6 _____																		
7 _____																		
8 _____																		
9 _____																		
10 _____																		
11 _____																		
			<u>120</u> = Total Cover															
Woody Vine Stratum (Plot size _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>														
1 _____																		
2 _____																		
			= Total Cover															
% Bare Ground in Herb Stratum <u>5%</u>																		
Remarks																		

Sampling Point: 400

HYDROLOGY

Western Mountains, Valleys, and Coast – Interim Version

Project/Site A22 City/County: Clallam Sampling Date 3-22-10
Applicant/Owner Morrison State _____ Sampling Point 236
Investigator(s) Emyers Section, Township, Range _____
Landform (hillslope terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
Subregion (LRR) _____ Lat _____ Long _____ Datum _____
Soil Map Unit Name _____ NWI classification _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

Hydrophytic Vegetation Present? Yes _____ No <u> </u> Hydric Soil Present? Yes _____ No <u> </u> Wetland Hydrology Present? Yes _____ No <u> </u>	Is the Sampled Area within a Wetland? Yes _____ No <u> X </u>
Remarks _____	

VEGETATION = USE SUBORDINATE CATEGORIES OF PLANT FUNCTIONAL GROUPS

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1 _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC	<u>1</u> (A)
2 _____	_____	_____	_____	Total Number of Dominant Species Across All Strata	<u>4</u> (B)
3 _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC	<u>25</u> (A/B)
4 _____	_____	_____	_____	= Total Cover	
Sapling/Shrub Stratum (Plot size _____)				Prevalence Index worksheet:	
1 _____	_____	_____	_____	Total % Cover of	Multiply by
2 _____	_____	_____	_____	OBL species	x 1 = _____
3 _____	_____	_____	_____	FACW species	x 2 = _____
4 _____	_____	_____	_____	FAC species	x 3 = _____
5 _____	_____	_____	_____	FACU species	x 4 = _____
= Total Cover				UPL species	x 5 = _____
Herb Stratum (Plot size _____)				Column Totals:	(A) _____ (B) _____
1 <u>L. Vulgare</u>	<u>60</u>	<u>x</u>	<u>UPL</u>	Prevalence Index = B/A = _____	
2 <u>D. carota</u>	<u>40</u>	<u>x</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators:	
3 <u>P. lanceolata</u>	<u>25</u>	<u>x</u>	<u>FACU</u>	___ Dominance Test is >50%	
4 <u>H. radicata</u>	<u>20</u>	<u>x</u>	<u>FAC</u>	___ Prevalence Index is >3.0 ¹	
5 _____	_____	_____	_____	___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
6 _____	_____	_____	_____	___ Wetland Non-Vascular Plants ¹	
7 _____	_____	_____	_____	___ Problematic Hydrophytic Vegetation ¹ (Explain)	
8 _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
9 _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>x</u>	
10 _____	_____	_____	_____	Woody Vine Stratum (Plot size _____)	
11 _____	_____	_____	_____	1 _____	
= Total Cover				2 _____	
= Total Cover				= Total Cover	
% Bare Ground in Herb Stratum <u>10%</u>				Remarks	

SOIL

Sampling Point

K316

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Lpc ²		
0-16	10YR3/3	100%						
216	10YR5/3		10YR4/6	15%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No K

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): 14

Saturation Present? Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No K

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Northern State WA Sampling Point 101
 Investigator(s) Myers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) terrace Local relief (concave, convex, none) flat Slope (%) 5%
 Subregion (LRR) UBA Lat _____ Long _____ Datum _____
 Soil Map Unit Name Bellingham (4) NWI classification na
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (if needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>		
Wetland Hydrology Present?	Yes <u>X</u> No _____		
Remarks			

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC <u>4</u> (A) Total Number of Dominant Species Across All Strata _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
1				
2				
3				
4				
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of _____ Multiply by _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals _____ (A) _____ (B) Prevalence Index = B/A = _____
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
Herb Stratum (Plot size _____)				
1 <u>D. glomerata</u>	<u>40</u>	<u>X</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators: Dominance Test is >50% _____ Prevalence Index is ≤3.0 _____ Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants _____ Problematic Hydrophytic Vegetation (Explain) _____ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2 <u>D. carota</u>	<u>25</u>	<u>X</u>	<u>UPL</u>	
3 <u>L. vulgare</u>	<u>25</u>	<u>X</u>	<u>UPL</u>	
4 <u>F. rubra</u>	<u>15</u>		<u>FAC</u>	
5 <u>Ranunculus spp</u>	<u>10</u>		<u>FACU</u>	
6 <u>Trifolium spp</u>	<u>5</u>		<u>FAC</u>	
7 <u>P. lanceolata</u>	<u>5</u>		<u>FACU</u>	
8 <u>V. hirsuta</u>	<u>5</u>		<u>UPL</u>	
9				
10				
11				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
_____ = Total Cover				
Woody Vine Stratum (Plot size _____)				
1				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks				

SOIL

Sampling Point K37

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-12	10YR3/3	100%						
713	10YR5/2		10YR4/6	15%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic

Restrictive Layer (If present):

Type _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No K

Remarks

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one required, check all that apply)				
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)				
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches): _____

Water Table Present? Yes X No _____ Depth (inches): _____

Saturation Present? Yes X No _____ Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes K No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Moulson State WA Sampling Point 435
 Investigator(s) Myers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) LRRA Lat _____ Long _____ Datum _____
 Soil Map Unit Name (4) NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks:		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC <u>2</u> (A) Total Number of Dominant Species Across All Strata <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC <u>40%</u> (A/B)
1				
2				
3				
4				
				Prevalence Index worksheet: Total % Cover of _____ Multiply by _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals _____ (A) _____ (B) Prevalence Index = B/A = _____
= Total Cover				
Sapling/Shrub Stratum (Plot size _____)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is >3.0 _____ 'Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants _____ Problematic Hydrophytic Vegetation (Explain) 'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.'
Herb Stratum (Plot size _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1 <u>D. carota</u>	<u>60</u>	<u>X</u>	<u>UPL</u>	
2 <u>Trifolium spp</u>	<u>40</u>	<u>X</u>	<u>FAC</u>	
3 <u>L. vulgare</u>	<u>25</u>	<u>X</u>	<u>UPL</u>	
4 <u>P. lanceolata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	
5 <u>H. radicata</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	
6 <u>D. glomerata</u>	<u>5</u>		<u>FACU</u>	
7				
8				
9				
10				
Woody Vine Stratum (Plot size _____)				
1				
2				
= Total Cover				
% Bare Ground in Herb Stratum <u>10%</u>				
Remarks				

SOIL

Sampling Point

K28

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-14	10YR3/3	100%						
7-14	10YR5/2		10YR5/6	60%				
			10YR6/6	30%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1) (except MLRA 1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if present):

Type _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1)
☐ Sediment Deposits (B2)
☐ Drift Deposits (B3)
☐ Algal Mat or Crust (B4)
☐ Iron Deposits (B5)
☐ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
☐ Salt Crust (B11)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres along Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Stunted or Stressed Plants (D1) (LRR A)
☐ Other (Explain in Remarks)
- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Geomorphic Position (D2)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)
☐ Raised Ant Mounds (D6) (LRR A)
☐ Frost-Heave Hummocks (D7)

Field Observations:

- Surface Water Present? Yes X No _____ Depth (inches): _____
 Water Table Present? Yes X No _____ Depth (inches): 10
 Saturation Present? Yes X No _____ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes V No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A2Z City/County Clallam Sampling Date 3.22.10
 Applicant/Owner MORRISON State WA Sampling Point 439
 Investigator(s) R. Myers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) 5.1
 Subregion (LRR) UPLA Lat _____ Long _____ Datum _____
 Soil Map Unit Name (4) NWI classification 10

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC <u>2</u> (A)
2 _____				Total Number of Dominant Species Across All Strata <u>5</u> (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC <u>40%</u> (A/B)
4 _____				
= Total Cover				
Sapling/Shrub Stratum (Plot size _____)				Prevalence Index worksheet:
1 _____				Total % Cover of _____ Multiply by _____
2 _____				OBL species _____ x 1 = _____
3 _____				FACW species _____ x 2 = _____
4 _____				FAC species _____ x 3 = _____
5 _____				FACU species _____ x 4 = _____
= Total Cover				UPL species _____ x 5 = _____
Herb Stratum (Plot size _____)				Column Totals _____ (A) _____ (B)
1 <u>D. carota</u>	<u>40</u>	<u>X</u>	<u>UPL</u>	Prevalence Index = B/A = _____
2 <u>L. vulgare</u>	<u>20</u>	<u>X</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators:
3 <u>D. glomerata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	Dominance Test is >50% _____
4 <u>Trifolium spp</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	Prevalence Index is ≤30% _____
5 <u>Ranunculus spp</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____
6 <u>V. hirsuta</u>	<u>5</u>		<u>UPL</u>	Wetland Non-Vascular Plants ¹ _____
7 _____				Problematic Hydrophytic Vegetation ¹ (Explain) _____
8 _____				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
9 _____				
10 _____				
11 _____				
= Total Cover				
Woody Vine Stratum (Plot size _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1 _____				
2 _____				
= Total Cover				
% Bare Ground in Herb Stratum <u>10%</u>				
Remarks				

Project/Site A27 City/County Clallam Sampling Date 3-22-10
Applicant/Owner M. J. Johnson State WA Sampling Point K40
Investigator(s) Ameyers Section, Township, Range _____
Landform (hillslope, terrace, etc.) terrace Local relief (concave, convex, none) flat Slope (%) 51
Subregion (LRR) LRA Lat _____ Long _____ Datum _____
Soil Map Unit Name (4) or (12) NWI classification na
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

Hydrophytic Vegetation Present?	Yes _____	No <u> </u>	Is the Sampled Area within a Wetland?	Yes _____	No <u> </u>
Hydric Soil Present?	Yes _____	No <u> </u>			
Wetland Hydrology Present?	Yes _____	No <u> </u>			
Remarks					

Tree Stratum (Plot size _____)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1	_____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC	2 (A)
2	_____	_____	_____	_____	Total Number of Dominant Species Across All Strata	5 (B)
3	_____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC	40 (A/B)
4	_____	_____	_____	_____		
				= Total Cover		
Sapling/Shrub Stratum (Plot size _____)					Prevalence Index worksheet:	
1	_____					
2	_____				Total % Cover of	Multiply by
3	_____				OBL species	x 1 =
4	_____				FACW species	x 2 =
5	_____				FAC species	x 3 =
				= Total Cover	FACU species	x 4 =
Herb Stratum (Plot size _____)					UPL species	x 5 =
1	D. carota	35	X	UPL	Column Totals	(A) _____ (B) _____
2	L. vulgare	30	X	UPL	Prevalence Index = B/A = _____	
3	Daucus glomerata	30	X	FACU	Hydrophytic Vegetation Indicators:	
4	Trifolium spp	20	X	FAC	Dominance Test is >50%	
5	Ranunculus spp	20	X	FACW	Prevalence Index is 53.0 ¹	
6	Vicia hirsuta	15		UPL	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
7	_____				Wetland Non-Vascular Plants ¹	
8	_____				Problematic Hydrophytic Vegetation ¹ (Explain)	
9	_____				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
10	_____					
11	_____					
				= Total Cover		
Woody Vine Stratum (Plot size _____)					Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	
1	_____					
2	_____					
				= Total Cover		
% Bare Ground in Herb Stratum <u>5.1</u>						
Remarks _____						

SOIL

Sampling Point: W40

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type			
0-12	10YR 3/3	100%						
7-12	10YR 5/2		10YR 4/6	15%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils¹:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

¹Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if present):

Type _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | |

Secondary Indicators (2 or more required)

- ☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)
- ☐ Raised Ant Mounds (D6) (LRR A)
- ☐ Frost-Heave Hummocks (D7)

Field Observations:

- Surface Water Present? Yes _____ No X Depth (inches): 14
- Water Table Present? Yes _____ No X Depth (inches): 14
- Saturation Present? Yes _____ No X Depth (inches): _____
- (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Moulson State WA Sampling Point RH1
 Investigator(s) Amyers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) UPLA Lat _____ Long _____ Datum _____
 Soil Map Unit Name HYA(12) NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks	

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2 _____				Total Number of Dominant Species Across All Strata _____ (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
4 _____				
= Total Cover				
Sapling/Shrub Stratum (Plot size _____)				Prevalence Index worksheet:
1 _____				Total % Cover of _____ Multiply by _____
2 _____				OBL species _____ x 1 = _____
3 _____				FACW species _____ x 2 = _____
4 _____				FAC species _____ x 3 = _____
5 _____				FACU species _____ x 4 = _____
= Total Cover				UPL species _____ x 5 = _____
Herb Stratum (Plot size _____)				Column Totals _____ (A) _____ (B)
1 <u>DAUCUS CAROTA</u>	<u>60</u>	<u>X</u>	<u>FACU</u>	Prevalence Index = B/A = _____
2 <u>PLANTAGO LANCEOLATA</u>	<u>40</u>	<u>X</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:
3 <u>TARAXACUM OFFICINALE</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	___ Dominance Test is >50%
4 <u>D. glomerata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	___ Prevalence Index is >3.0
5 <u>L. pulchra</u>	<u>25</u>	<u>X</u>	<u>UPL</u>	___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
6 <u>VICIA HIRSUTA</u>	<u>15</u>		<u>UPL</u>	___ Wetland Non-Vascular Plants
7 _____				___ Problematic Hydrophytic Vegetation ¹ (Explain)
8 _____				Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
9 _____				
10 _____				
11 _____				
= Total Cover <u>180</u>				
Woody Vine Stratum (Plot size _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1 _____				
2 _____				
= Total Cover				
% Bare Ground in Herb Stratum <u>51</u>				
Remarks				

SOIL

Sampling Point: RH1

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-10	10YR 4/1	100%					
210	10YR 5/2		10YR 5/6	35%			
			10YR 5/10	20%			

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	

Secondary Indicators (2 or more required)

<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): 110

Saturation Present? Yes _____ No _____ Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Moulson State WA Sampling Point B42
 Investigator(s) DMJ Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) 51
 Subregion (LRR) LREA Lat _____ Long _____ Datum _____
 Soil Map Unit Name (12) NWI classification na
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>/</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>/</u>	
Wetland Hydrology Present? Yes _____ No <u>/</u>	
Remarks	

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC <u>1</u> (A)
2 _____				Total Number of Dominant Species Across All Strata <u>3</u> (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC <u>33%</u> (A/B)
4 _____				
= Total Cover				
Sapling/Shrub Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1 _____				Total % Cover of _____ Multiply by _____
2 _____				OBL species _____ x 1 = _____
3 _____				FACW species _____ x 2 = _____
4 _____				FAC species _____ x 3 = _____
5 _____				FACU species _____ x 4 = _____
= Total Cover				UPL species _____ x 5 = _____
				Column Totals _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1 <u>Leucanthemum vulgare</u>	<u>60</u>	<u>X</u>	<u>UPL</u>	_____ Dominance Test is >50%
2 <u>Daucus caerulea</u>	<u>20</u>	<u>X</u>	<u>UPL</u>	_____ Prevalence Index is >3.0
3 <u>H. radicata</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	_____ 'Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
4 <u>D. glomerata</u>	<u>15</u>		<u>FACU</u>	_____ Wetland Non-Vascular Plants
5 _____				_____ Problematic Hydrophytic Vegetation (Explain)
6 _____				_____ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
7 _____				
8 _____				
9 _____				
10 _____				
11 _____				
= Total Cover				
Woody Vine Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1 _____				
2 _____				
= Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks				

SOIL

Sampling Point: K42

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-8	10YR 3/3	100%						
7-8	10YR 5/2		10YR 5/6	7%				
			10YR 4/6	3%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if present):

Type _____

Depth (inches) _____

Hydric Soil Present? Yes _____ No X

Remarks _____

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): 116

Saturation Present? Yes _____ No _____ Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____

Remarks _____

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A32 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Moulson State WA Sampling Point 43
 Investigator(s) Brubaker Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>/</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>/</u>	
Wetland Hydrology Present? Yes _____ No <u>/</u>	
Remarks	

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC. <u>0</u> (A)
2 _____				Total Number of Dominant Species Across All Strata _____ (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
4 _____				
				Prevalence Index worksheet:
_____ = Total Cover				Total % Cover of _____ Multiply by _____
Sapling/Shrub Stratum (Plot size _____)				OBL species _____ x 1 = _____
1 _____				FACW species _____ x 2 = _____
2 _____				FAC species _____ x 3 = _____
3 _____				FACU species _____ x 4 = _____
4 _____				UPL species _____ x 5 = _____
5 _____				Column Totals _____ (A) _____ (B)
_____ = Total Cover				Prevalence Index = B/A = _____
Herb Stratum (Plot size _____)				Hydrophytic Vegetation Indicators:
1 <u>Leucanthemum vulgare</u>	<u>70</u>	<u>X</u>	<u>UPL</u>	Dominance Test is >50%
2 <u>Dracopis carota</u>	<u>30</u>	<u>X</u>	<u>UPL</u>	Prevalence Index is <3.0
3 <u>T. officinale</u>	<u>25</u>	<u>X</u>	<u>FACU</u>	Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
4 <u>D. glomerata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	Wetland Non-Vascular Plants
5 <u>P. lanceolata</u>	<u>10</u>		<u>FACU</u>	Problematic Hydrophytic Vegetation (Explain)
6 <u>Ranunculus spp</u>	<u>5</u>		<u>FACU</u>	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
7 <u>Trifolium spp</u>	<u>5</u>		<u>FACU</u>	
8 _____				
9 _____				
10 _____				
11 _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size _____)				
1 _____				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2 _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks				

SOIL

Sampling Point: K43

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-12	10YR 3/3	100%					
213	10YR 5/2		10YR 4/4	7%			
			10YR 4/6	15%			

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	² Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): 116

Water Table Present? Yes _____ No X Depth (inches): 116

Saturation Present? Yes _____ No _____ Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Moulson State WA Sampling Point K44
 Investigator(s) Ruys Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks _____		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC <u>0</u> (A) Total Number of Dominant Species Across All Strata _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
1 _____				
2 _____				
3 _____				
4 _____				
				= Total Cover
Sapling/Shrub Stratum (Plot size _____)				Prevalence Index worksheet: Total % Cover of _____ Multiply by _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals _____ (A) _____ (B)
1 _____				
2 _____				
3 _____				
4 _____				
5 _____				
				= Total Cover
Herb Stratum (Plot size _____)				Hydrophytic Vegetation Indicators: Dominance Test is >50% Prevalence Index is 53.0' 'Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants _____ Problematic Hydrophytic Vegetation (Explain) 'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.'
1 <u>D. carota</u>	<u>45</u>	<u>X</u>	<u>UPL</u>	
2 <u>D. glomerata</u>	<u>30</u>	<u>X</u>	<u>FACU</u>	
3 <u>P. parviflora</u>	<u>25</u>	<u>X</u>	<u>FACU</u>	
4 <u>L. vulgare</u>	<u>25</u>	<u>X</u>	<u>UPL</u>	
5 <u>H. radicata</u>	<u>10</u>		<u>FAC</u>	
6 <u>Ranunculus spp</u>	<u>5</u>		<u>FACW</u>	
7 <u>V. hirsuta</u>	<u>5</u>		<u>UPL</u>	
8 <u>T. officinale</u>	<u>5</u>		<u>FACU</u>	
9 _____				
10 _____				
11 _____				
				= Total Cover
Woody Vine Stratum (Plot size _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1 _____				
2 _____				
				= Total Cover
% Bare Ground in Herb Stratum _____				
Remarks _____				

SOIL

Sampling Point: K44

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-14	10YR5/3	100%						
716	10YR5/2		10YR6/10	30%				
			10YR5/10	15%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if present):

Type _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No K

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes X No _____ Depth (inches): 8Saturation Present? Yes X No _____ Depth (inches): _____
(includes capillary fringe)Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site PDZ City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Morrison State WA Sampling Point R45
 Investigator(s) Bruyars Section, Township, Range _____
 Landform (hillslope, terrace, etc.) terrace Local relief (concave, convex, none) flat Slope (%) 5.1
 Subregion (LRR) UPPA Lat _____ Long _____ Datum _____
 Soil Map Unit Name (12) NWI classification nc
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>/</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Wetland Soil Present? Yes _____ No <u>/</u>	
Wetland Hydrology Present? Yes _____ No <u>/</u>	
Remarks:	

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC <u>0</u> (A)
2 _____				Total Number of Dominant Species Across All Strata _____ (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
4 _____				
= Total Cover				
Sapling/Shrub Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1 _____				Total % Cover of _____ Multiply by _____
2 _____				OBL species _____ x 1 = _____
3 _____				FACW species _____ x 2 = _____
4 _____				FAC species _____ x 3 = _____
5 _____				FACU species _____ x 4 = _____
				UPL species _____ x 5 = _____
= Total Cover				Column Totals: _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1 <u>Dactylis glomerata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	— Dominance Test is >50%
2 <u>L. vulgare</u>	<u>20</u>	<u>X</u>	<u>UPL</u>	— Prevalence Index is ≤3.0
3 <u>E. crusgalli</u>	<u>15</u>		<u>FACU</u>	— "Morphological Adaptations" (Provide supporting data in Remarks or on a separate sheet)
4 <u>E. rubra</u>	<u>10</u>		<u>FAC</u>	— Wetland Non-Vascular Plants
5 <u>D. arvensis</u>	<u>10</u>		<u>UPL</u>	— Problematic Hydrophytic Vegetation (Explain)
6 <u>T. officinale</u>	<u>5</u>		<u>FACU</u>	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
7 <u>V. hirsuta</u>	<u>5</u>		<u>UPL</u>	
8 <u>P. lanceolata</u>	<u>5</u>		<u>FACU</u>	
9 _____				
10 _____				
11 _____				
= Total Cover				
Woody Vine Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1 _____				
2 _____				
= Total Cover				
% Bare Ground in Herb Stratum: _____				
Remarks:				

SOIL

Sampling Point

K45

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-11	10YR3/3	100%						
212	10YR5/2	10YR5/6	40%					

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if present):

Type _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____

Water Table Present? Yes _____ No ☒ Depth (inches): _____

Saturation Present? Yes _____ No ☒ Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Morrison State _____ Sampling Point K46
 Investigator(s) Amyers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks:		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC <u>2</u> (A) Total Number of Dominant Species Across All Strata <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC <u>40%</u> (A/B)
1 _____				
2 _____				
3 _____				
4 _____				
= Total Cover				
Sapling/Shrub Stratum (Plot size _____)				
1 _____				Hydrophytic Vegetation Indicators: — Dominance Test is >50% — Prevalence Index is ≤3.0 — Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) — Wetland Non-Vascular Plants ¹ — Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 _____				
3 _____				
4 _____				
= Total Cover				
Herb Stratum (Plot size _____)				
1 <u>L. vulgare</u>	<u>25</u>	<u>X</u>	<u>UPL</u>	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2 <u>D. carota</u>	<u>25</u>	<u>X</u>	<u>UPL</u>	
3 <u>D. glomerata</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	
4 <u>Bad. incultus spp</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	
5 <u>F. rubra</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	
6 <u>H. radicata</u>	<u>15</u>		<u>FAC</u>	
7 <u>V. hirsuta</u>	<u>5</u>		<u>UPL</u>	
8 <u>T. officinale</u>	<u>5</u>		<u>FACU</u>	
= Total Cover				
Woody Vine Stratum (Plot size _____)				
1 _____				
2 _____				
= Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks				

SOIL

Sampling Point: HH6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Lpc ²		
0-13	10YR 5/3	100%						
214	10YR 5/2		10YR 5/6	13%				
			10YR 5/6	3%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? Yes _____ No _____ Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge monitoring well, aerial photos, previous inspections), if available

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A28 City/County Clallam Sampling Date 3-22-10
 Applicant/Owner Morrison State WA Sampling Point K47
 Investigator(s) Myers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks _____		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC _____ (A) Total Number of Dominant Species Across All Strata _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC <u>33%</u> (A/B)
1 _____				
2 _____				
3 _____				
4 _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size _____)				
1 _____				Hydrophytic Vegetation Indicators: — Dominance Test is >50% — Prevalence Index is >3.0 — "Morphological Adaptations" (Provide supporting data in Remarks or on a separate sheet) — Wetland Non-Vascular Plants — Problematic Hydrophytic Vegetation (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
2 _____				
3 _____				
4 _____				
_____ = Total Cover				
Herb Stratum (Plot size _____)				
1 <u>Dalea</u>	<u>25</u>	<u>X</u>	<u>FACU</u>	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2 <u>D. carota</u>	<u>35</u>	<u>X</u>	<u>UPL</u>	
3 <u>F. rubra</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	
4 <u>L. vulgare</u>	<u>15</u>		<u>UPL</u>	
5 <u>Trifolium spp</u>	<u>15</u>		<u>FAC</u>	
6 <u>P. lanceolata</u>	<u>10</u>		<u>FACU</u>	
7 <u>V. hirsuta</u>	<u>5</u>		<u>UPL</u>	
8 <u>H. radicata</u>	<u>5</u>		<u>FAC</u>	
9 <u>E. crassipes</u>	<u>5</u>		<u>FACU</u>	
10 _____				
11 _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size _____)				
1 _____				
2 _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks _____				

SOIL

Sampling Point

K47

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-14	10YR3/3	100%						
7-15	10YR6/2		10YR5/6	15%				
			10YR4/6	7%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 2 cm Muck (A10) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present):

Type _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes ☒ No _____ Depth (inches): 10

Saturation Present? Yes ☒ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes ☒ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: A22 City/County: Clallam Sampling Date: 3.22.10
 Applicant/Owner: Mallison State: _____ Sampling Point: 245
 Investigator(s): Bruiers Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____
 Subregion (LRR): _____ Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks:		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC. <u>0</u> (A) Total Number of Dominant Species Across All Strata _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)	
1 <u>Pseudotsuga menziesii</u>	1		UPL		
2 _____				Prevalence Index worksheet: Total % Cover of _____ Multiply by _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals _____ (A) _____ (B) Prevalence Index = B/A = _____	
3 _____					
4 _____					
= Total Cover					
Sapling/Shrub Stratum (Plot size _____)					
1 _____				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0' ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Wetland Non-Vascular Plants ¹ ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2 _____					
3 _____					
4 _____					
5 _____					
= Total Cover					
Herb Stratum (Plot size _____)					
1 <u>Dactylis glomerata</u>	20	X	FACU		
2 <u>L. vulgare</u>	35	X	UPL		
3 <u>D. carota</u>	25	X	FACU		
4 <u>Taraxacum officinale</u>	10		FACU		
5 <u>Plantago lanceolata</u>	18		FACU		
6 <u>Ranunculus spp</u>	10		FACW		
7 <u>Trifolium spp</u>	10		FAC		
8 _____					
9 _____					
10 _____					
11 _____					
125 = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	
Woody Vine Stratum (Plot size _____)					
1 _____					
2 _____					
= Total Cover					
% Bare Ground in Herb Stratum <u>10.1</u>					
Remarks					

SOIL

Sampling Point: K4E

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	10YR5/2		10YR6/6	1%				Clay loam
			10YR4/4	1%				
>9	10YR5/2		10YR4/6	30%				Clay
			10YR6/6	5%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes K No _____

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes X No _____ Depth (inches): 10"

Saturation Present? Yes X No _____ Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes K No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Morison State WA Sampling Point W49
 Investigator(s) Ameyers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) 5.7
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes <u>X</u> No _____	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC <u>1</u> (A)
2 _____				Total Number of Dominant Species Across All Strata <u>4</u> (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC <u>25%</u> (A/B)
4 _____				
				<u>_____</u> = Total Cover
Sapling/Shrub Stratum (Plot size _____)				Prevalence Index worksheet:
1 _____				Total % Cover of _____ Multiply by _____
2 _____				OBL species _____ x 1 = _____
3 _____				FACW species <u>15</u> x 2 = <u>30</u>
4 _____				FAC species <u>35</u> x 3 = <u>105</u>
5 _____				FACU species <u>60</u> x 4 = <u>240</u>
				UPL species <u>65</u> x 5 = _____
				Column Totals <u>175</u> (A) _____ (B)
				Prevalence Index = B/A = <u>3.8</u>
Herb Stratum (Plot size _____)				Hydrophytic Vegetation Indicators:
1 <u>D. glomerata</u>	<u>30</u>	<u>X</u>	<u>FACU</u>	Dominance Test is >50%
2 <u>L. vulgare</u>	<u>35</u>	<u>X</u>	<u>UPL</u>	Prevalence Index is ≤3.0
3 <u>D. carota</u>	<u>30</u>	<u>X</u>	<u>UPL</u>	'Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
4 <u>P. officinalis</u>	<u>15</u>		<u>FACU</u>	Welland Non-Vascular Plants
5 <u>P. lanceolata</u>	<u>15</u>		<u>FACU</u>	Problematic Hydrophytic Vegetation (Explain)
6 <u>T. flavum spp</u>	<u>25</u>	<u>X</u>	<u>FACU</u>	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
7 <u>P. racemosa spp</u>	<u>15</u>		<u>FACU</u>	
8 <u>F. rubra</u>	<u>10</u>		<u>FAC</u>	
9 _____				
10 _____				
11 _____				
<u>175</u> Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
Woody Vine Stratum (Plot size _____)				
1 _____				
2 _____				
<u>10%</u> = Total Cover				
% Bare Ground in Herb Stratum <u>10%</u>				
Remarks				

SOIL

Sampling Point: **K49**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-11	10YR3/2		10YR5/3	3%				
			10YR5/6	1%				
>11	10YR5/3		10YR5/6	10%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Indicators for Problematic Hydric Soils¹:

¹Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (If present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes ☒ No ☐ Depth (inches): 12"

Water Table Present? Yes ☒ No ☐ Depth (inches): 12"

Saturation Present? Yes ☒ No ☐ Depth (inches): _____

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

Remarks

Project/Site A22 City/County Chatham Sampling Date 3-22-10
Applicant/Owner Morrison State _____ Sampling Point K50
Investigator(s) Amyers Section, Township, Range _____
Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) 5%
Subregion (LRR) U1A Lat _____ Long _____ Datum _____
Soil Map Unit Name (4) NWI classification na
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation _____ Soil _____ or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			
Remarks					

Tree Stratum (Plot size _____)		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1	_____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC	1 (A)
2	_____	_____	_____	_____	Total Number of Dominant Species Across All Strata	3 (B)
3	_____	_____	_____	_____		
4	_____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC	33% (A/B)
					= Total Cover	
Sapling/Shrub Stratum (Plot size _____)					Prevalence Index worksheet:	
1	_____					
2	_____				Total % Cover of	Multiply by
3	_____				OBL species	x 1 =
4	_____				FACW species	x 2 =
5	_____				FAC species	x 3 =
					FACU species	x 4 =
					UPL species	x 5 =
					Column Totals	(A) (B)
					Prevalence Index = B/A =	
Herb Stratum (Plot size _____)					Hydrophytic Vegetation Indicators:	
1	D. glomerata	30	x	FACU		
2	Festuca rubra	15	x	FAC	___ Dominance Test is >50%	
3	D. carzota	25	x	UPL	___ Prevalence Index is ≤30'	
4	T. officinale	15		FACU	___ Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)	
5	Ranunculus spp.	10		FACW	___ Wetland Non-Vascular Plants'	
6	L. vulgaris	15		UPL	___ Problematic Hydrophytic Vegetation' (Explain)	
7	Trifolium spp.	10		FAC	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic	
8	Vicia hirsuta	15		UPL		
9	Plantago lanceolata	10		FACU		
10	_____					
11	_____					
					125 = Total Cover	
Woody Vine Stratum (Plot size _____)					Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	
1	_____					
2	_____					
					= Total Cover	
% Bare Ground in Herb Stratum		15%				
Remarks						

SOIL

Sampling Point

K50

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-12	10YR3/3	100%						
7-12	10YR5/2		10YR6/6	40%				
			10YR4/6	20%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:			Secondary Indicators (2 or more required)	
Primary Indicators (minimum of one required, check all that apply)				
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)		
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)		
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)		
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)		
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)		
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)		
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)		
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)		
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)		
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)				
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)				

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): 14"

Water Table Present? Yes _____ No X Depth (inches): 14"

Saturation Present? Yes _____ No X Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 4/5/1
 Applicant/Owner Morrison State _____ Sampling Point _____
 Investigator(s) Amyers Section, Township, Range _____
 Landform (hill/slope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) 5%
 Subregion (LRR) LRRA Lat _____ Long _____ Datum _____
 Soil Map Unit Name (4) NWI classification na
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes _____ No <u>X</u>	
Remarks		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC <u>1</u> (A) Total Number of Dominant Species Across All Strata <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC <u>33%</u> (A/B)
1				
2				
3				
4				
				Prevalence Index worksheet: Total % Cover of _____ Multiply by _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals _____ (A) _____ (B) Prevalence Index = B/A = _____
				Hydrophytic Vegetation Indicators: Dominance Test is > 50% Prevalence Index is > 3.0 Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants Problematic Hydrophytic Vegetation (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
Sapling/Shrub Stratum (Plot size _____)				
1				
2				
3				
4				
5				
Herb Stratum (Plot size _____)				
1	<u>E. crassifolia</u>	<u>20</u>	<u>X</u> <u>FACW</u>	
2	<u>D. glomerata</u>	<u>20</u>	<u>X</u> <u>FACU</u>	
3	<u>T. racemosa</u>	<u>20</u>	<u>X</u> <u>FACU</u>	
4	<u>V. hirsuta</u>	<u>15</u>	<u>UPL</u>	
5	<u>P. lanceolata</u>	<u>10</u>	<u>FACU</u>	
6	<u>B. racemosa</u>	<u>15</u>	<u>FACU</u>	
7				
8				
9				
10				
11				
				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
Woody Vine Stratum (Plot size _____)				
1				
2				
% Bare Ground in Herb Stratum	<u>15%</u>			
Remarks				

SOIL

Sampling Point: K51
1400

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-14	10YR 3/3	100%						
214	10YR 5/2		10YR 4/6	15%				
			10YR 6/6	20%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): 17"Saturation Present? Yes _____ No X Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Morrison State WA Sampling Point H55
 Investigator(s) Myers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) 5.1
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (if needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No _____	
Remarks		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC <u>0</u> (A)
2 _____				Total Number of Dominant Species Across All Strata _____ (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
4 _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1 _____				Total % Cover of: _____ Multiply by: _____
2 _____				OBL species _____ x 1 = _____
3 _____				FACW species _____ x 2 = _____
4 _____				FAC species _____ x 3 = _____
5 _____				FACU species _____ x 4 = _____
_____ = Total Cover				UPL species _____ x 5 = _____
				Column Totals _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1 <u>D. glomerata</u>	<u>25</u>	<u>X</u>	<u>FACU</u>	Dominance Test is > 50% _____
2 <u>T. officinale</u>	<u>30</u>	<u>X</u>	<u>FACU</u>	Prevalence Index is > 3.0 _____
3 <u>L. vulgaris</u>	<u>25</u>	<u>X</u>	<u>UPL</u>	"Morphological Adaptations" (Provide supporting data in Remarks or on a separate sheet) _____
4 <u>E. cruce-galli</u>	<u>10</u>		<u>FACU</u>	Wetland Non-Vascular Plants _____
5 <u>Banunculus spp</u>	<u>10</u>		<u>FACU</u>	Problematic Hydrophytic Vegetation (Explain) _____
6 <u>Trifolium spp</u>	<u>10</u>		<u>FAC</u>	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic _____
7 <u>H. radicata</u>	<u>5</u>		<u>FAC</u>	
8 <u>V. hirsuta</u>	<u>5</u>		<u>UPL</u>	
9 _____				
10 _____				
11 _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present?
1 _____				Yes <u>X</u> No <u>X</u>
2 _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks				

SOIL

Sampling Point

K52

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	10YR3/3	100%						

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | <input type="checkbox"/> Redox Depressions (F8) |

- ☐ 2 cm Muck (A10)
☐ Red Parent Material (TF2)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

Secondary Indicators (2 or more required)

- | | | |
|--|---|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B) | <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Salt Crust (B11) | <input type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Water Marks (B1) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Sediment Deposits (B2) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | <input type="checkbox"/> Geomorphic Position (D2) |
| <input type="checkbox"/> Drift Deposits (B3) | <input type="checkbox"/> Presence of Reduced Iron (C4) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Algal Mat or Crust (B4) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Iron Deposits (B5) | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A) | <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Other (Explain in Remarks) | <input type="checkbox"/> Frost-Heave Hummocks (D7) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | | |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) | | |

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____
 Water Table Present? Yes X No _____ Depth (inches): 10"
 Saturation Present? Yes X No _____ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

Remarks

slight elevation gain to brown or @ least not green vegetation. New growth.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22u City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Morrison State WA Sampling Point H53
 Investigator(s) Myers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>/</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>/</u>	
Wetland Hydrology Present?	Yes _____ No <u>/</u>	
Remarks		

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC <u>0</u> (A)
2 _____				Total Number of Dominant Species Across All Strata _____ (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
4 _____				
				<u> </u> = Total Cover
Sapling/Shrub Stratum (Plot size _____)				Prevalence Index worksheet:
1 _____				Total % Cover of _____ Multiply by _____
2 _____				OBL species _____ x 1 = _____
3 _____				FACW species _____ x 2 = _____
4 _____				FAC species _____ x 3 = _____
5 _____				FACU species _____ x 4 = _____
				UPL species _____ x 5 = _____
				Column Totals _____ (A) _____ (B)
				Prevalence Index = B/A = _____
Herb Stratum (Plot size _____)				Hydrophytic Vegetation Indicators:
1 <u>D. glomerata</u>	<u>30</u>	<u>X</u>	<u>FACU</u>	___ Dominance Test is >50%
2 <u>D. carota</u>	<u>20</u>	<u>X</u>	<u>UPL</u>	___ Prevalence Index is >3.0
3 <u>L. vulgare</u>	<u>25</u>	<u>X</u>	<u>UPL</u>	___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4 <u>T. officinale</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	___ Wetland Non-Vascular Plants
5 <u>Ranunculus</u>	<u>5</u>		<u>FACU</u>	___ Problematic Hydrophytic Vegetation ² (Explain)
6 <u>V. hirsuta</u>	<u>5</u>		<u>UPL</u>	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
7 <u>P. lanceolata</u>	<u>10</u>		<u>FACU</u>	
8 <u>H. radicata</u>	<u>10</u>		<u>FAC</u>	
9 _____				
10 _____				
11 _____				
				<u>125</u> = Total Cover
Woody Vine Stratum (Plot size _____)				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
1 _____				
2 _____				
				<u> </u> = Total Cover
% Bare Ground in Herb Stratum <u>10%</u>				
Remarks				

SOIL

Sampling Point

4503

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0-13	10YR 5/3	100%					
213	10YR 5/2	10YR 5/6 7%	10YR 5/6 15%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ☒

Remarks

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required, check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No ☒ Depth (inches): 15"

Saturation Present? Yes _____ No ☒ Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Morrison State WA Sampling Point 154
 Investigator(s) Myers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) _____
 Subregion (LRR) LLFA Lat _____ Long _____ Datum _____
 Soil Map Unit Name (4) NWI classification _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks	

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 _____				Number of Dominant Species That Are OBL, FACW, or FAC. <u>1</u> (A)
2 _____				Total Number of Dominant Species Across All Strata <u>4</u> (B)
3 _____				Percent of Dominant Species That Are OBL, FACW, or FAC <u>25%</u> (A/B)
4 _____				
				Prevalence Index worksheet:
= Total Cover				Total % Cover of _____ Multiply by _____
Sampling/Shrub Stratum (Plot size _____)				OBL species _____ x 1 = _____
1 _____				FACW species _____ x 2 = _____
2 _____				FAC species _____ x 3 = _____
3 _____				FACU species _____ x 4 = _____
4 _____				UPL species _____ x 5 = _____
5 _____				Column Totals _____ (A) _____ (B)
= Total Cover				Prevalence Index = B/A = _____
Herb Stratum (Plot size _____)				Hydrophytic Vegetation Indicators:
1 <u>DACTYLUS GLOMERATA</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	___ Dominance Test is >50%
2 <u>DACTYLUS GLABRA</u>	<u>25</u>	<u>X</u>	<u>UPL</u>	___ Prevalence Index is <3.0
3 <u>ARXACUM OBLICUATE</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	___ 'Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)
4 <u>FESTUCA RUBRA</u>	<u>15</u>		<u>FAC</u>	___ Wetland Non-Vascular Plants
5 <u>TRIFOLIUM SPP</u>	<u>5</u>		<u>FAC</u>	___ Problematic Hydrophytic Vegetation (Explain)
6 <u>HYPOCHAERIS RADICATA</u>	<u>5</u>		<u>FAC</u>	___ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
7 <u>DICTA VIRGATA</u>	<u>5</u>		<u>UPL</u>	
8 <u>ARUNCULUS SPP</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	
9 _____				
10 _____				
11 _____				
= Total Cover <u>135</u>				
Woody Vine Stratum (Plot size _____)				
1 _____				
2 _____				
= Total Cover				
% Bare Ground in Herb Stratum _____				
Remarks				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>

SOIL

Sampling Point: 2504

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features			Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹			
0-13	10YR 3/3	100%						
213	10YR 6/3		10YR 6/10	15%				
			10YR 4/6	7%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (If present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes X No _____ Depth (inches): 10"Saturation Present? Yes X No _____ Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A22 City/County Clallam Sampling Date 3.22.10
 Applicant/Owner Morrison State WA Sampling Point 1055
 Investigator(s) Emyers Section, Township, Range _____
 Landform (hillslope, terrace, etc.) _____ Local relief (concave, convex, none) _____ Slope (%) 5%
 Subregion (LRR) _____ Lat _____ Long _____ Datum _____
 Soil Map Unit Name _____ NWI classification _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks)
 Are Vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 Are Vegetation _____ Soil _____ or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>X</u>
Hydric Soil Present?	Yes _____ No <u>X</u>		
Wetland Hydrology Present?	Yes <u>X</u> No _____		
Remarks _____			

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC <u>0</u> (A) Total Number of Dominant Species Across All Strata _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC _____ (A/B)
1				
2				
3				
4				
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of _____ Multiply by _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals _____ (A) _____ (B) Prevalence Index = B/A = _____
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size _____)				
1				
2				
3				
4				
5				
_____ = Total Cover				Hydrophytic Vegetation Indicators: Dominance Test is >50% _____ Prevalence Index is ≤3.0 _____ 'Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants _____ Problematic Hydrophytic Vegetation (Explain) _____ 'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.'
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
_____ = Total Cover				
Herb Stratum (Plot size _____)				
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
_____ = Total Cover				
_____ = Total Cover				
Woody Vine Stratum (Plot size _____)				
1				
2				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>5%</u>				
Remarks _____				

SOIL

Sampling Point 4510

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type ¹	Loc ²	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-13	10YR3/3	100%						
@15	10YR5/2		10YR5/6	10%				
			10YR4/6	10%				
			10YR5/4	10%				

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present unless disturbed or problematic

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> FAC-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes X No _____ Depth (inches): 5"Saturation Present? Yes X No _____ Depth (inches): _____
(includes capillary fringe)Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site A27 City/County Challenger Sampling Date 3.22.10
 Applicant/Owner Morrison State VT Sampling Point 157
 Investigator(s) Amey Section, Township, Range flat
 Landform (hillslope, terrace, etc) terrace Local relief (concave, convex, none) flat Slope (%) 5%
 Subregion (LRR) LRR7 Lat 44° 12' N Long 72° 51' W Datum NAD83
 Soil Map Unit Name (12) Challenger NWI classification na
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No X
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present?	Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present?	Yes <u>X</u> No <u> </u>	

Remarks

A larger % of bare ground in this non-wetland area

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 <u> </u>	<u> </u>	<u> </u>	<u> </u>	Number of Dominant Species That Are OBL, FACW, or FAC <u>1</u> (A)
2 <u> </u>	<u> </u>	<u> </u>	<u> </u>	Total Number of Dominant Species Across All Strata <u>3</u> (B)
3 <u> </u>	<u> </u>	<u> </u>	<u> </u>	Percent of Dominant Species That Are OBL, FACW, or FAC <u>33%</u> (A/B)
4 <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Sapling/Shrub Stratum (Plot size <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1 <u> </u>	<u> </u>	<u> </u>	<u> </u>	Total % Cover of <u> </u> Multiply by <u> </u>
2 <u> </u>	<u> </u>	<u> </u>	<u> </u>	OBL species <u> </u> x 1 = <u> </u>
3 <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACW species <u> </u> x 2 = <u> </u>
4 <u> </u>	<u> </u>	<u> </u>	<u> </u>	FAC species <u> </u> x 3 = <u> </u>
5 <u> </u>	<u> </u>	<u> </u>	<u> </u>	FACU species <u> </u> x 4 = <u> </u>
<u> </u> = Total Cover				UPL species <u> </u> x 5 = <u> </u>
				Column Totals <u> </u> (A) <u> </u> (B)
				Prevalence Index = B/A = <u> </u>
Herb Stratum (Plot size <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1 <u>D. carota</u>	<u>35</u>	<u>X</u>	<u>UPL</u>	<u> </u> Dominance Test is >50%
2 <u>D. glomerata</u>	<u>30</u>	<u>X</u>	<u>FACU</u>	<u> </u> Prevalence Index is >3.0
3 <u>Ranunculus spp</u>	<u>20</u>	<u>X</u>	<u>FACU</u>	<u> </u> Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
4 <u>A. radicata</u>	<u>10</u>	<u> </u>	<u>FAC</u>	<u> </u> Wetland Non-Vascular Plants
5 <u>Trifolium spp</u>	<u>10</u>	<u> </u>	<u>EAC</u>	<u> </u> Problematic Hydrophytic Vegetation (Explain)
6 <u>L. virginica</u>	<u>10</u>	<u> </u>	<u>UPL</u>	<u> </u> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
7 <u>P. lanceolata</u>	<u>5</u>	<u> </u>	<u>FACU</u>	
8 <u> </u>	<u> </u>	<u> </u>	<u> </u>	
9 <u> </u>	<u> </u>	<u> </u>	<u> </u>	
10 <u> </u>	<u> </u>	<u> </u>	<u> </u>	
11 <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
Woody Vine Stratum (Plot size <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1 <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2 <u> </u>	<u> </u>	<u> </u>	<u> </u>	
<u> </u> = Total Cover				
% Bare Ground in Herb Stratum <u>20%</u>				

Remarks

Sampling Point: 457

HYDROLOGY

US Army Corps of Engineers



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